

DRAFT OFFSET GUIDANCE

June 12, 2000

The purpose of this memo is to provide guidance and clarification with respect to the application of the offset requirements of Rule 240. It applies to nonattainment pollutants for which a new source is classified as major. It also applies to the nonattainment pollutants, which cause the change at an existing major source to be classified as a major modification (240 §306.1)

GENERAL REQUIREMENTS

1. Offsets must be obtained for the same pollutant; interpollutant trading is not allowed. (240 §306.4)
2. Offsets are not required for temporary sources (240 §305.6) which will not operate in the nonattainment area for less than 1 year and the temporary source is covered by and in compliance with a valid air quality.
3. To be acceptable, the offsets must meet all of the following requirements:
 - a. They must be obtained in the allowable offset area.
 - b. They must be surplus.
 - c. They must be identified in the permit when it is issued and in place before startup.
 - d. They must be enforceable by the Administrator of the USEPA.
 - e. They must be quantifiable
 - f. The combination of the new facility and the offsets will result in reasonable further progress toward reaching attainment for that pollutant.
 - g. An emission reduction may only be used if it will last for the lifetime of the facility and is legally and federally enforceable. An initial showing that the reduction will last for at least 15 years will be acceptable as demonstrating the lifetime of the facility requirement, unless a shorter timeframe is appropriate. This, however, does not mean that the Permittee does not have to replace the offsets after 15 years if they should no longer be valid and the facility is still in operation. The emission reduction will be considered legally enforceable if it meets the requirements of Rule 240 §306.12.
 - h. Future source shutdowns or curtailments in operation may only be used for offsets if they meet the requirements for notification of affected employees contained in Rule 240 §306.10. The Department will accept an advance notification to employees of 30 days or more as meeting this requirement. Shutdowns that occurred before the application for the facility requiring offsets was filed may only be used if the shutdown occurred at the same facility and the new unit is a replacement for the old unit.
4. Replacing a VOC with a VOC of lower atmospheric reactivity does not generate an offset. (Rule 240 §306.9)
5. A tons per year credit cannot be used for offset calculations if that time frame does not represent the overall effect that the offset or offset requirement will have in reaching attainment. Seasonal sources are an example that may be subject to this restriction. (Rule 240 §306.9)

6. The baseline period for calculating emission reduction credits is two calendar years before the year in which the application for the source that will utilize the offsets was filed. The Control Officer may, at his discretion, accept a different 24 month period if the Control Officer deems that period to be more representative of normal operations. In no case, however, shall the time period extend back beyond 5 years.

The baseline emission rate shall be the actual emission rate from the facility providing the offsets during the baseline period. However, as a means of encouraging pollution prevention, if the offset generator had voluntarily reduced actual emissions from previous levels, the offset calculations may be made using the appropriate emission factors for the two year period before the change took place, even if it is outside of the accepted baseline period. This would result in the use of an emission rate outside the baseline period to be used in combination with the capacity utilization and hours of operation from the most recent two years or other 24 month period accepted by the Control Officer as the baseline period. This approach may only be used if the voluntary reductions still meet all of the requirements necessary to be deemed as surplus as well as meeting all other applicable requirements at the time they will be used as offsets.

OFFSET REQUIREMENTS FOR OZONE NONATTAINMENT AREAS (Applies to Volatile Organic Compounds and Oxides of Nitrogen)

Modeling requirements: None

Offset ratios: must meet the requirements of Rule 240 §§306.3 and 307.

Allowable offset area: anywhere in the designated ozone nonattainment area.

Net Air Quality Benefit Analysis: None required

OFFSET REQUIREMENTS FOR OTHER NONATTAINMENT AREAS (Applies to carbon monoxide, particulate matter smaller than 10 microns (PM10), oxides of sulfur and oxides of nitrogen if the area is nonattainment for that particular pollutant)

Modeling requirements to establish if there is a significant impact area: The facility must model its emissions to determine if there will be a significant impact. Concentrations which exist within the facility boundary will not be considered when determining if there is a significant impact if the size of the facility is accepted by the Control Officer as being necessary for that type of facility and if access by the general public is effectively restricted.

The analysis must be based on all emissions from the facility or facility change, including fugitives, and must use the maximum allowable potential to emit under normal operating conditions, including startup and shutdown if appropriate.

The significance levels will be those listed in Rule 240 §213 and the analysis must cover the time period associated with each relevant significance level.

Either a screening model or a more sophisticated model may be used as long as it meets the requirements of Rule 240 §§303 and 510.

Requirements if there is no significant impact area:

Allowable Offset Area: The entire nonattainment area for that particular pollutant may be used to obtain offsets. However, the offsets should come from as close to the source as possible. If the sources from which the offsets will be obtained are greater than one mile from the facility, the applicant must show to the satisfaction of the Control Officer that the applicant tried but was unable to find sufficient offsets closer to the facility. In addition, the offsets must meet the distance versus offset ratio requirements listed in the following offset ratio paragraph.

Offset ratio: The minimum offset ratio shall be 1.05-for-1 but may be higher depending on the distance from the facility and the method chosen for demonstrating that there is a net air quality benefit produced by the offsets.

Distance From Facility, miles	Required Offset Ratio
0 to 1	1.05-for 1
1 to 3	1.1-for-1
3 to 10	1.3-for-1
Greater than 10 miles	1.5-for-1

Net Air Quality Benefit Analysis: The applicant must show that there is a net air quality benefit for the allowable offset area, in this case the entire nonattainment area, associated with the offsets in accordance with the methods described in Rule 240 §306.6. However, if the offsets meet the ratio versus distance requirements listed in the allowable offset area paragraph of this section, it will be assumed that the offsets provide a net air quality benefit.

Requirements if there is a significant impact area:

Allowable Offset Area If there is a significant impact area, the allowable offset area is the same as the significant impact area for that particular pollutant. The allowable offset area may be expanded if the applicant can show through modeling that the quantity and location of the proposed offsets reduces the impact of the proposed source's emissions to below the significance level for all offsite locations. If offsets are obtained from outside the significant impact area as a means of bringing the impact to below the significance level, the area available for offsets may be expanded up to the entire nonattainment area. However, if offsets are obtained from outside of the significant impact area, the allowable offset area for which the net air quality benefit must be demonstrated is a circle with a radius equal to the distance from the source to the most distant source used for offsets for that pollutant.

Offset ratio: There is no fixed offset ratio. Rather, the quantity of offsets must be sufficient to show a net air quality benefit in the significant impact area. If offsets are obtained from outside of the significant impact area, they must be in sufficient quantity to reduce the impact of the sources' emissions to below the significance level for all offsite locations. However, in no case may the offset ratio be less than 1.05-for-1.

Net Air Quality Benefit Analysis: The applicant must show that there is a net air quality benefit for the allowable offset area. In the special case where the offsets come from outside the significant impact area and reduce the impacts at all offsite locations to below the significance levels, it will be assumed that the offsets provide a net air quality benefit if the offset versus distance ratios are met.

Distance From significant
impact area boundary, miles

Required Offset Ratio

0 to 1	1.05-for 1
1 to 3	1.1-for-1
3 to 10	1.3-for-1
Greater than 10 miles	1.5-for-1